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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/667,640	09/22/2003	Vitaly Burkatovsky	111102.156	1110
28089	7590	12/15/2005	EXAMINER	
WILMER CUTLER PICKERING HALE AND DORR LLP			PHAM, THOMAS K	
399 PARK AVENUE			ART UNIT	
NEW YORK, NY 10022			PAPER NUMBER	
			2121	

DATE MAILED: 12/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/667,640

Applicant(s)

BURKATOVSKY, VITALY

Examiner

Thomas K. Pham

Art Unit

2121

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 September 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-15 is/are allowed.
- 6) ☒ Claim(s) 16, 18, 20, 21, 23 and 25 is/are rejected.
- 7) ☒ Claim(s) 17, 19, 22, 24 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

First Action on the Merits

1. Claims 1-25 of U.S. Application 10/667,640 filed on 09/22/2003 are presented for examination.

Quotations of U.S. Code Title 35

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim Rejections - 35 USC § 102

6. Claims 16, 18, 20, 21, 23 and 25 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 6,739,145 (“Bhatnagar”).

Regarding claim 16

Bhatnagar teaches a configurable controller for controlling a plurality of loads (see FIG. 1), comprising:

- a control logic (see col. 8 lines 43-50);
- a plurality of configurable output control logic modules connected with said control logic (see col. 9 line 66 to col. 10 line 11, “configurable logic circuit (L)”; and
- a plurality of high-side and low-side output drivers connected with said configurable output control logic modules, said drivers additionally connected with a plurality of output pins of said controller (see col. 12 lines 35-39, col. 13 lines 1-3, and col. 13 lines 42-45).

Examiner interprets that the plurality of outputs for driving a plurality of loads including driving for both high and low loads as required the loads.

Regarding claim 21

Bhatnagar teaches a method of controlling a plurality of loads (see FIG. 1), comprising the steps of:

- providing a control logic (see col. 8 lines 43-50);
- providing a plurality of configurable output control logic modules connected with said control logic (see col. 9 line 66 to col. 10 line 11, “configurable logic circuit (L)”);

Art Unit: 2121

- providing a plurality of high-side and low-side output drivers connected with said configurable output control logic modules, said drivers additionally connected with a plurality of output pins of said controller (see col. 12 lines 35-39, col. 13 lines 1-3, and col. 13 lines 42-45); and
- configuring each of said plurality of configurable output control logic modules to drive at least one of said high-side and low-side drivers, said configuring according to the connections between said loads and said drivers (see col. 11 lines 12-29).

Examiner interprets that the plurality of outputs for driving a plurality of loads including driving for both high and low loads as required the loads.

Regarding claim 18

Bhatnagar teaches at least one of said configurable output control logic modules is connected to one of said low-side drivers or to one of said high-side drivers (see col. 12 lines 27-34, col. 12 lines 59-65, and col. 13 lines 34-41), said one driver connected through a respective output pin of said controller to a load (see FIG. 6), wherein said configurable output control logic module is configured to drive said one driver (see col. 12 lines 35-39, col. 13 lines 1-3, and col. 13 lines 42-45).

Regarding claim 20

Bhatnagar teaches at least one of said configurable output control logic modules is connected to two of said high-side drivers (see col. 12 lines 27-34, col. 12 lines 59-65, and col. 13 lines 34-41), said two high-side drivers connected through respective output pins of said controller to one side of a load (see FIG. 6), wherein said configurable output control logic module is configured

Art Unit: 2121

to simultaneously control said two high-side drivers (see col. 12 lines 35-39, col. 13 lines 1-3, and col. 13 lines 42-45).

Regarding claim 23

Bhatnagar teaches at least one of said configurable output control logic modules is connected to one of said low-side drivers or to one of said high-side drivers (see col. 12 lines 27-34, col. 12 lines 59-65, and col. 13 lines 34-41), said one driver connected through a respective output pin of said controller to a load (see FIG. 6), wherein said configurable output control logic module is configured to drive said one driver (see col. 12 lines 35-39, col. 13 lines 1-3, and col. 13 lines 42-45).

Regarding claim 25

Bhatnagar teaches at least one of said configurable output control logic modules is connected to two of said high-side drivers (see col. 12 lines 27-34, col. 12 lines 59-65, and col. 13 lines 34-41), said two high-side drivers connected through respective output pins of said controller to one side of a load (see FIG. 6), wherein said configurable output control logic module is configured to simultaneously control said two high-side drivers (see col. 12 lines 35-39, col. 13 lines 1-3, and col. 13 lines 42-45).

Allowable Subject Matter

7. Claims 17, 19, 22 and 24 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Reasons for Allowance

8. Claims 1-15 are allowed.

9. The following is an examiner's statement of reasons for allowance:

While Bhatnagar (U.S. Patent No. 6,739,145) discloses a configurable electronic controller for a wide variety of control functions including the configuring of both analog and digital input, output, user and power supply interfaces, as required, with minimal physical changes, and at low cost. The configurable controller comprising control circuitry for providing control functions, and output interface circuitry for providing output signals to one or more loads. Bhatnagar does not teach a synchronization control module connected to a plurality of configurable signal acquisition modules, and a synchronizing signal generator connected with the synchronization control module and with the plurality of input cell; and other limitations related to these features in combination with the remaining elements and features of the claimed invention.

And Payne et al. (U.S. Patent No. 5,306,995) discloses a highly flexible electronic control system which is readily reconfigurable to suit more than one machine. The controller includes elements for implementing appliance functions for each of the plurality of appliances by activating the functional elements in a suitable manner, and for preliminarily determining the particular appliance pattern while monitoring others to logically recognize the particular appliance. Payne does not teach a synchronization control module connected to a plurality of configurable signal acquisition modules, and a synchronizing signal generator connected with the synchronization control module and with the plurality of input cell; and other limitations related

Art Unit: 2121

to these features in combination with the remaining elements and features of the claimed invention.

Neither of these references taken either alone or in combination discloses a method and device for acquiring a plurality of signals having all the claimed features of applicant's instant invention, specifically including: a synchronization control module connected to a plurality of configurable signal acquisition modules, and a synchronizing signal generator connected with the synchronization control module and with the plurality of input cells, wherein each one of said plurality of input cells is operable to convert input signal parameters to time-based parameters; and wherein each of said signal acquisition modules is configured to convert said time-based parameters to a required digital form. Also, there is no motivation to combine the Bhatnagar reference with the Payne reference to meet these limitations.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to examiner *Thomas Pham*; whose telephone number is (571) 272-3689, Monday - Thursday from 6:30 AM - 5:00 PM EST or contact Supervisor *Mr. Anthony Knight* at (571) 272-3687.

Any response to this office action should be mailed to: **Commissioner for Patents, P.O. Box 1450, Alexandria VA 22313-1450**. Responses may also be faxed to the **official fax number (571) 273-8300**.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Thomas Pham
Patent Examiner

A handwritten signature in black ink, appearing to read 'T. Pham', with a long horizontal flourish extending to the right.

December 12, 2005